

WHAT IS CLAIMED IS:

1. A toothbrush comprising:
a handle portion being formed with a neck at one end thereof, said
5 handle portion extending along a first longitudinal axis;
a head section coupled to the neck, the head including a plurality of
first cleaning members provided on a first head side thereof and extending
outwardly from said first head side generally perpendicular to said first
longitudinal axis; and said head section including a second cleaning member
10 provided on a second head side thereof opposite to said first head side, said
second cleaning member including a plurality of flat-tipped conical-shaped
cleaning elements for cleaning the tongue surface which extend outwardly
from the second head side of the head section generally perpendicular to the
first longitudinal axis.
- 15 2. The toothbrush of claim 1 wherein said second cleaning
member is molded of a relatively soft elastomeric material.
3. The toothbrush of claim 1 wherein said conical shaped
cleaning elements are in the shape of short thin whiskers.
4. The toothbrush of claim 1 wherein said conical-shaped
20 cleaning elements have tips at an end thereof which are less than 0.5mm in
diameter for optimum tongue cleaning penetration.
5. The toothbrush of claim 4 wherein said tips are less than 0.2
mm in diameter.
6. The toothbrush of claim 1 wherein said second cleaning
25 element is made from a flexibly resilient thermoplastic elastomer.
7. The toothbrush of claim 1 wherein each of said flat-tipped
conical-shaped cleaning elements has a height which is within the range of
0.020" to 0.100".
8. The toothbrush of claim 7 wherein each of said flat-tipped
30 conical-shaped cleaning elements has a height which is within the range of
0.040" to 0.060".

9. The toothbrush of claim 1 wherein said second cleaning member is made of an elastomeric material having a hardness which is within the range of Shore A8 to Shore A25 hardness.

10. The toothbrush of claim 1 wherein said second cleaning member is injection molded into a cavity provided in the head section.

11. A tongue cleaning member for a toothbrush including a plurality of flat-tipped conical-shaped cleaning elements for cleaning the tongue surface.

12. The tongue cleaning member of claim 11 wherein said conical shaped cleaning elements are in the shape of short thin whiskers.

13. The tongue cleaning member of claim 11 wherein said conical shaped cleaning elements have tips at an end thereof which are less than 0.1mm in diameter for optimum tongue cleaning penetration.

14. The tongue cleaning member of claim 11 from a flexibly resilient thermoplastic material.

15. The tongue cleaning member of claim 11 made of an elastomeric material having a hardness which is within the range of Shore A8 to Shore A25 hardness.

16. The tongue cleaning member of claim 11 wherein each of said flat-tipped conical-shaped cleaning elements has a height which is within the range of 0.020" to 0.100".

17. The tongue cleaning member of claim 11 wherein each of said flat-tipped conical shaped cleaning elements has a height which is within the range of 0.040" to 0.060".

18. The tongue cleaning member of claim 11 wherein the flat-tipped conical-shaped cleaning elements are densely disposed on and extend from a bottom face of a head section of the toothbrush.

19. The tongue cleaning member of claim 18 wherein said flat-tipped conical-shaped cleaning elements are spaced from an adjacent conical-shaped cleaning element at a spacing within the range of approximately 0.020" to 0.120".

20. The tongue cleaning member of claim 18 wherein approximately 200 to 500 conical shaped cleaning elements per square inch are disposed on the bottom face of the head section of the toothbrush.

21. A toothbrush comprising:

5 a handle portion being formed with a neck at one end thereof, said handle portion extending along a first longitudinal axis;

a head section coupled to the neck, the head including a plurality of first cleaning members provided on a first head side thereof and extending outwardly from said first head side generally perpendicular to said first longitudinal axis; and said head section including a second cleaning member provided on a second head side thereof opposite to said first head side, said second cleaning member including a plurality of grated cleaning elements for cleaning the tongue surface which extend outwardly from the second head side of the head section generally perpendicular to the first longitudinal axis.

15 22. The toothbrush of claim 21 wherein said second cleaning member is molded of a relatively soft elastomeric material.

23. The toothbrush of claim 21 wherein each of said grated cleaning elements includes a front cleaning face formed of a generally concave cleaning surface.

20 24. The toothbrush of claim 21 wherein said grated cleaning elements comprises a front cleaning face including a pair of dispersion grooves having an inclined cleaning plane disposed therebetween.

25 25. The toothbrush of claim 21 wherein said grated cleaning elements include a front cleaning face formed of a generally concave cleaning surface and a rear cleaning face including a pair of dispersion grooves having an inclined cleaning plane disposed therebetween.

26. The toothbrush of claim 21 wherein said grated cleaning elements include a front cleaning face formed of a generally concave cleaning surface with a portion thereof extending below a base portion of the second cleaning member.

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27. The toothbrush of claim 21 wherein said grated cleaning elements include a front cleaning face having a cut-out grooved arc segment having a bottom surface which is inclined so as to extend below a base portion of the second cleaning member.

5 28. The toothbrush of claim 21 wherein each of said grated cleaning elements has a height which is less than 0.100".

29. The toothbrush of claim 21 wherein said second cleaning member is made of an elastomeric material having a hardness which is within the range of Shore A8 to Shore A25 hardness.

10 30. The toothbrush of claim 21 wherein said second cleaning member is injection molded into a cavity provided in the head section.

31. A tongue cleaning member for a toothbrush including a plurality of grated cleaning elements for cleaning the tongue surface.

15 32. A method for manufacturing a toothbrush having a brush head section comprising the step of injection molding first cleaning members on a first side of the brush section and second cleaning members on a second side of the brush head opposite to the first side by one shot of elastomeric material in the same operation.

20 33. The method of manufacturing a toothbrush of claim 32 wherein said step of injection molding said first cleaning members includes the step of forming bristle members on the front side of the brush head section.

25 34. The method of manufacturing a toothbrush of claim 32 wherein said step of injection molding said second cleaning member includes the step of form a tongue cleaning member on the rear side of the brush head section.